

## CLAIMS

1. A housing (1") for an implantable tissue stimulating device, comprising:

- a first wall (11") having a first generally flat exterior surface,
- a second wall (12") having a second generally flat exterior surface, and
- a third circumferential wall (13") joining said first (11") and second (12") wall and comprising a curved circumferential first wall section (14") being connected to said first wall (11"), a curved circumferential second wall section (15") being connected to said second wall (12"),

said housing (1") being connectable to an electrode lead (3") having an electrode, which is adapted to be in contact with a tissue, at a distal end thereof, characterised in

- the first wall (11") being adapted to face the skin of a patient,
- at least the third wall (13") being made of a conductive material, said conductive material being adapted to be in electrical contact with a surrounding tissue and to serve as an electrode, and
- a curve radius of the first wall section (14") being smaller than a curve radius of the second wall section (15"), for curve radii in planes essentially perpendicular to the first and second surfaces, whereby
- when a voltage is applied between the housing (1") and the electrode an electric field is obtained having lower field strength along the curved second wall section (15") than along the curved first wall section (14").

2. The device according to claim 1, wherein

- the first wall (11") being made of a conductive material, and adapted to be in electrical contact with a surrounding tissue and to serve as an electrode conjointly with the third wall (13").

3. The device according to claim 1 or 2, wherein

- the second wall (12") being made of a conductive material, and adapted to be in electrical contact with a surrounding tissue and to serve as an electrode conjointly with at least the third wall (13").

4. The device according to any preceding claim, wherein

- the first (14") and second (15") wall sections being circularly curved in said planes.

5. The device according to claim 4, wherein

- each of the first (14") and second (15") wall sections have centres of curvature along a continuous first and second curve, respectively.

6. The device according to claim 5, wherein

- the continuous first and second curves are essentially parallel.

7. The device according to any preceding claim, wherein

- the ratio between the curve radii is in the range of 1:2-1:6.

8. The device according to any preceding claim, wherein

- the ratio between the curve radii is about 1:4.

9. The device according to any preceding claim, wherein

- the first exterior surface is rough.

10. The device according to any preceding claim, wherein  
- the first exterior surface is contoured.

5 11. The device according to claim 10, wherein  
- the first exterior surface is provided with a plurality  
of ridges (16").

12. The device according to claim 11, wherein  
- each of the ridges (16") is provided with at least one  
edge being a sharp corner.

13. The device according to any preceding claim, wherein  
- the second exterior surface is polished.

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